

# PATENT COOPERATION TREATY

From the INTERNATIONAL BUREAU

**PCT**

## NOTIFICATION OF ELECTION

(PCT Rule 61.2)

To:

Commissioner  
US Department of Commerce  
United States Patent and Trademark  
Office, PCT  
2011 South Clark Place Room  
CP2/5C24  
Arlington, VA 22202  
ETATS-UNIS D'AMERIQUE  
in its capacity as elected Office

<b>Date of mailing</b> (day/month/year) 18 January 2001 (18.01.01)	
<b>International application No.</b> PCT/US00/04737	<b>Applicant's or agent's file reference</b> 112756.403
<b>International filing date</b> (day/month/year) 25 February 2000 (25.02.00)	<b>Priority date</b> (day/month/year) 26 February 1999 (26.02.99)
<b>Applicant</b> WALKER, Richard, C.	

1. The designated Office is hereby notified of its election made:

☒ in the demand filed with the International Preliminary Examining Authority on:  
22 September 2000 (22.09.00)

☐ in a notice effecting later election filed with the International Bureau on:  
\_\_\_\_\_

2. The election ☒ was  
☐ was not

made before the expiration of 19 months from the priority date or, where Rule 32 applies, within the time limit under Rule 32.2(b).

<b>The International Bureau of WIPO</b> 34, chemin des Colombettes 1211 Geneva 20, Switzerland Facsimile No.: (41-22) 740.14.35	<b>Authorized officer</b> S. Mafla Telephone No.: (41-22) 338.83.38
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# PATENT COOPERATION TREATY

From the  
INTERNATIONAL PRELIMINARY EXAMINING AUTHORITY

To:  
IRAH H. DONNER  
HALE AND DORR LLP  
1455 PENNSYLVANIA AVE., N.W.  
WASHINGTON, DC 20004

## PCT

### NOTIFICATION OF TRANSMITTAL OF INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Rule 71.1)

Date of Mailing  
(day/month/year)

02 AUG 2001

Applicant's or agent's file reference

112756.403

#### IMPORTANT NOTIFICATION

International application No.

International filing date (day/month/year)

Priority date (day/month/year)

PCT/US00/04737

25 February 2000 (25.02.2000)

26 February 1999 (26.02.1999)

Applicant

Kline and Walker, LLC

1. The applicant is hereby notified that this International Preliminary Examining Authority transmits herewith the international preliminary examination report and its annexes, if any, established on the international application.
2. A copy of the report and its annexes, if any, is being transmitted to the International Bureau for communication to all the elected Offices.
3. Where required by any of the elected Offices, the International Bureau will prepare an English translation of the report (but not of any annexes) and will transmit such translation to those Offices.
4. **REMINDER**

The applicant must enter the national phase before each elected Office by performing certain acts (filing translations and paying national fees) within 30 months from the priority date (or later in some Offices)(Article 39(1))(see also the reminder sent by the International Bureau with Form PCT/IB/301).

Where a translation of the international application must be furnished to an elected Office, that translation must contain a translation of any annexes to the international preliminary examination report. It is the applicant's responsibility to prepare and furnish such translation directly to each elected Office concerned.

For further details on the applicable time limits and requirements of the elected Offices, see Volume II of the PCT Applicant's Guide.

Name and mailing address of the IPEA/US

Commissioner of Patents and Trademarks  
Box PCT  
Washington, D.C. 20231

Facsimile No. (703)305-3230

Form PCT/IPEA/416 (July 1992)

Authorized officer

Brian A Zimmerman

Telephone No. 703-305-4700

# PATENT COOPERATION TREATY

From the INTERNATIONAL SEARCHING AUTHORITY

RECEIVED

JUN 15 2000

PCT

H0 dkt'd  
cgm u/28

To: IRAH H. DONNER  
PEPPER HAMILTON LLP  
600 FOURTEENTH STREET, NW  
WASHINGTON DC 20005-2004

NOTIFICATION OF TRANSMITTAL OF  
THE INTERNATIONAL SEARCH REPORT  
OR THE DECLARATION

(PCT Rule 44.1)

Date of Mailing  
(day/month/year)

13 JUN 2000

Applicant's or agent's file reference

112756.403     110273-403

FOR FURTHER ACTION     See paragraphs 1 and 4 below

International application No.

PCT/US00/04737

International filing date  
(day/month/year)

25 FEBRUARY 2000

Applicant

KLINE & WALKER, LLC

1. ☒ The applicant is hereby notified that the international search report has been established and is transmitted herewith.  

**Filing of amendments and statement under Article 19:**  
The applicant is entitled, if he so wishes, to amend the claims of the international application (see Rule 46):

When? The time limit for filing such amendments is normally 2 months from the date of transmittal of the international search report; however, for more details, see the notes on the accompanying sheet.

Where? Directly to the International Bureau of WIPO  
34, chemin des Colombettes  
1211 Geneva 20, Switzerland  
Facsimile No.: (41-22) 740.14.35

For more detailed instructions, see the notes on the accompanying sheet.
2. ☐ The applicant is hereby notified that no international search report will be established and that the declaration under Article 17(2)(a) to that effect is transmitted herewith.
3. ☐ With regard to the protest against payment of (an) additional fee(s) under Rule 40.2, the applicant is notified that:

☐ the protest together with the decision thereon has been transmitted to the International Bureau together with the applicant's request to forward the texts of both the protest and the decision thereon to the designated Offices.  
☐ no decision has been made yet on the protest; the applicant will be notified as soon as a decision is made.
4. Further action(s): The applicant is reminded of the following:

Shortly after 18 months from the priority date, the international application will be published by the International Bureau. If the applicant wishes to avoid or postpone publication, a notice of withdrawal of the international application, or of the priority claim, must reach the International Bureau as provided in rules 90 bis 1 and 90 bis 3, respectively, before the completion of the technical preparations for international publication.

Within 19 months from the priority date, a demand for international preliminary examination must be filed if the applicant wishes to postpone the entry into the national phase until 30 months from the priority date (in some Offices even later).

Within 20 months from the priority date, the applicant must perform the prescribed acts for entry into the national phase before all designated Offices which have not been elected in the demand or in a later election within 19 months from the priority date or could not be elected because they are not bound by Chapter II.

Name and mailing address of the ISA/US  
Commissioner of Patents and Trademarks  
Box PCT  
Washington, D.C. 20231

Facsimile No. (703) 305-3230

Authorized officer

BRIAN ZIMMERMAN

Telephone No. (703) 305-3900

(See notes on accompanying sheet)

# PATENT COOPERATION TREATY

## PCT

### INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference 112756.403	<div style="display: flex; justify-content: space-between;"> <div> <b>FOR FURTHER ACTION</b>            see Notification of Transmittal of International Search Report            (Form PCT/ISA/220) as well as, where applicable, item 5 below.         </div> <div>           International filing date (day/month/year)            25 FEBRUARY 2000         </div> <div>           (Earliest) Priority Date (day/month/year)            26 FEBRUARY 1999         </div> </div>	
International application No. PCT/US00/04737		
Applicant KLINE & WALKER, LLC		

This international search report has been prepared by this International Searching Authority and is transmitted to the applicant according to Article 18. A copy is being transmitted to the International Bureau.

This international search report consists of a total of 4 sheets.

☒ It is also accompanied by a copy of each prior art document cited in this report.

**1. Basis of the report**

- a. With regard to the language, the international search was carried out on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.
  - ☐ the international search was carried out on the basis of a translation of the international application furnished to this Authority (Rule 23.1(b)).
- b. With regard to any nucleotide and/or amino acid sequence disclosed in the international application, the international search was carried out on the basis of the sequence listing:
  - ☐ contained in the international application in written form.
  - ☐ filed together with the international application in computer readable form.
  - ☐ furnished subsequently to this Authority in written form.
  - ☐ furnished subsequently to this Authority in computer readable form.
  - ☐ the statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.
  - ☐ the statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.
2. ☐ Certain claims were found unsearchable (See Box I).
3. ☐ Unity of invention is lacking (See Box II).
4. With regard to the title,
  - ☐ the text is approved as submitted by the applicant.
  - ☒ the text has been established by this Authority to read as follows:  
**Tracking and Monitoring Equipment with Security Applications**

**5. With regard to the abstract,**

- ☐ the text is approved as submitted by the applicant.
- ☒ the text has been established, according to Rule 38.2(b), by this Authority as it appears in Box III. The applicant may, within one month from the date of mailing of this international search report, submit comments to this Authority.

**6. The figure of the drawings to be published with the abstract is Figure No. 1**

- ☐ as suggested by the applicant.
- ☒ because the applicant failed to suggest a figure.
- ☐ because this figure better characterizes the invention.

☐ None of the figures.

# INTERNATIONAL SEARCH REPORT

International application No.  
PCT/US00/04737

## A. CLASSIFICATION OF SUBJECT MATTER

IPC(7) : H04Q 1/00

US CL : 340/825.06, 825.31; 701/115

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

U.S. : 340/825.06, 825.31

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	US 5576716 A (Sadler) 19 November 1996, abstract and description of figure 1	1-36
Y	US 5625556 A (Janky) 29 April 1997, abstract and description of figure 2	1-36
A	US 4977399 A (Price) 11 December 1990, abstract	1-36
A,9	US 6005494 A (Schramm) 21 December 1999, abstract	1-36
A,9	US 5983156 A (Andrews) 09 November 1999, abstract	1-36
A,P	US 5966285 A (Sellers) 12 October 1999, abstract	1-36

☒ Further documents are listed in the continuation of Box C.

☐ See patent family annex.

\* Special categories of cited documents:

\*A\* document defining the general state of the art which is not considered to be of particular relevance

\*E\* earlier document published on or after the international filing date

\*L\* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

\*O\* document referring to an oral disclosure, use, exhibition or other means

\*P\* document published prior to the international filing date but later than the priority date claimed

\*T\*

later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

\*X\*

document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

\*Y\*

document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art

\*A\*

document member of the same patent family

Date of the actual completion of the international search

03 MAY 2000

Date of mailing of the international search report

13 JUN 2000

Name and mailing address of the ISA/US  
Commissioner of Patents and Trademarks  
Box PCT  
Washington, D.C. 20231

Facsimile No. (703) 305-3230

Authorized officer

BRIAN ZIMMERMAN

Telephone No. (703) 305-3900

# INTERNATIONAL SEARCH REPORT

International application No.  
PCT/US00/04737

## C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 5767788 A (Ness) 16 June 1998, abstract	1-36
A	US 5631947 A (Wittstein) 20 May 1997, abstract	1-36
A	US 5539645 A (Mandhyan) 23 July 1996, abstract	1-36

## NOTES TO FORM PCT/ISA/220 (continued)

The following examples illustrate the manner in which amendments must be explained in the accompanying letter:

1. [Where originally there were 48 claims and after amendment of some claims there are 51]:  
"Claims 1 to 29, 31, 32, 34, 35, 37 to 48 replaced by amended claims bearing the same numbers; claims 30, 33 and 36 unchanged; new claims 49 to 51 added."
2. [Where originally there were 15 claims and after amendment of all claims there are 11]:  
"Claims 1 to 15 replaced by amended claims 1 to 11."
3. [Where originally there were 14 claims and the amendments consist in cancelling some claims and in adding new claims]:  
"Claims 1 to 6 and 14 unchanged; claims 7 to 13 cancelled; new claims 15, 16 and 17 added." or  
"Claims 7 to 13 cancelled; new claims 15, 16 and 17 added; all other claims unchanged."
4. [Where various kinds of amendments are made]:  
"Claims 1-10 unchanged; claims 11 to 13, 18 and 19 cancelled; claims 14, 15 and 16 replaced by amended claim 14; claim 17 subdivided into amended claims 15, 16 and 17; new claims 20 and 21 added."

### "Statement under Article 19(1)" (Rule 46.4)

The amendments may be accompanied by a statement explaining the amendments and indicating any impact that such amendments might have on the description and the drawings (which cannot be amended under Article 19(1)).

The statement will be published with the international application and the amended claims.

The statement should be brief, it should not exceed 500 words if in English or if translated into English.

It should not be confounded with and does not replace the letter indicating the differences between the claims as filed and as amended. It must be filed on a separate sheet and must be identified as such by a heading, preferably by using the words "Statement under Article 19(1)."

It should not contain any disparaging comments on the international search report or the relevance of citations contained in that report. Reference to citations, relevant to a given claim, contained in the international search report may be made only in connection with an amendment of that claim.

### In what language?

The amendments must be made in the language in which the international application is published. The letter and any statement accompanying the amendments must be in the same language as the international application if that language is English or French; otherwise, it must be in English or French, at the choice of the applicant.

### Consequence if a demand for international preliminary examination has already been filed?

If, at the time of filing any amendments under Article 19, a demand for international preliminary examination has already been submitted, the applicant must preferably, at the same time of filing the amendments with the International Bureau, also file a copy of such amendments with the International Preliminary Examining Authority (see Rule 62.2(s), first sentence).

### Consequence with regard to translation of the international application for entry into the national phase?

The applicant's attention is drawn to the fact that, where upon entry into the national phase, a translation of the claims as amended under Article 19 may have to be furnished to the designated/elected Offices, instead of, or in addition to, the translation of the claims as filed.

For further details on the requirements of each designated/elected Office, see Volume II of the PCT Applicant's Guide.

# PATENT COOPERATION TREATY

## PCT

### INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference <b>110273.403</b>	<b>FOR FURTHER ACTION</b>		See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416)
International application No. <b>PCT/US00/04737</b>	International filing date (day/month/year) <b>25 February 2000 (25.02.2000)</b>	Priority date (day/month/year) <b>26 February 1999 (26.02.1999)</b>	
International Patent Classification (IPC) or national classification and IPC <b>IPC(6): H04Q 1/00 and US Cl.: 340/825.06,5.1</b>			
Applicant <b>KLINE AND WALKER, LLC</b>			

1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.

2. This REPORT consists of a total of 3 sheets, including this cover sheet.

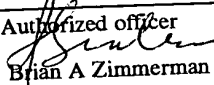
☒ This report is also accompanied by ANNEXES, i.e., sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).

These annexes consist of a total of 12 sheets.

3. This report contains indications relating to the following items:

- I ☒ Basis of the report
- II ☐ Priority
- III ☐ Non-establishment of report with regard to novelty, inventive step and industrial applicability
- IV ☐ Lack of unity of invention
- V ☒ Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- VI ☐ Certain documents cited
- VII ☐ Certain defects in the international application
- VIII ☐ Certain observations on the international application

Date of submission of the demand <b>22 September 2000 (22.09.2000)</b>	Date of completion of this report <b>29 June 2001 (29.06.2001)</b>
Name and mailing address of the IPEA/US Commissioner of Patents and Trademarks Box PCT Washington, D.C. 20231 Facsimile No. (703)305-3230	Authorized officer  <b>Brian A. Zimmerman</b> Telephone No. 703-305-4700



# INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.

PCT/US00/04737

## I. Basis of the report

### 1. With regard to the elements of the international application:\*

☐ the international application as originally filed.

☒ the description:

pages 1-101 as originally filed

pages NONE, filed with the demand

pages NONE, filed with the letter of \_\_\_\_\_

☒ the claims:

pages NONE, as originally filed

pages NONE, as amended (together with any statement) under Article 19

pages NONE, filed with the demand

pages 102-110c, filed with the letter of 13 June 2001

☒ the drawings:

pages 1-22, as originally filed

pages NONE, filed with the demand

pages NONE, filed with the letter of \_\_\_\_\_

☐ the sequence listing part of the description:

pages NONE, as originally filed

pages NONE, filed with the demand

pages NONE, filed with the letter of \_\_\_\_\_

### 2. With regard to the language, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.

These elements were available or furnished to this Authority in the following language \_\_\_\_\_ which is:

☐ the language of a translation furnished for the purposes of international search (under Rule 23.1(b)).

☐ the language of publication of the international application (under Rule 48.3(b)).

☐ the language of the translation furnished for the purposes of international preliminary examination (under Rules 55.2 and/or 55.3).

### 3. With regard to any nucleotide and/or amino acid sequence disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:

☐ contained in the international application in printed form.

☐ filed together with the international application in computer readable form.

☐ furnished subsequently to this Authority in written form.

☐ furnished subsequently to this Authority in computer readable form.

☐ The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.

☐ The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

### 4. ☐ The amendments have resulted in the cancellation of:

☐ the description, pages NONE

☐ the claims, Nos. NONE

☐ the drawings, sheets/fig NONE

### 5. ☐ This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).\*\*

\* Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rules 70.16 and 70.17).

\*\* Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.

# WRITTEN OPINION

International application No.  
PCT/US00/04737

## V. Reasoned statement under Rule 66.2(a)(ii) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

### 1. STATEMENT

Novelty (N)	Claims <u>1-37</u>	YES
	Claims <u>NONE</u>	NO
Inventive Step (IS)	Claims <u>NONE</u>	YES
	Claims <u>1-37</u>	NO
Industrial Applicability (IA)	Claims <u>1-37</u>	YES
	Claims <u>NONE</u>	NO

### 2. CITATIONS AND EXPLANATIONS

Claims 1-37 lack an inventive step under PCT Article 33(3) as being obvious over Sadler in view of Janky. Janky shows a vehicle management system where the vehicle monitors sensors to determine the location of the vehicle. Sadler shows a vehicle management system where sensed data is transmitted to the owner of the vehicle on a real time basis using a two way communication system. To have used the vehicle reporting concept to communicate the data sensed by Janky would not involve an inventive step.

It is the examiner's position that the use of the term primary focal node does not impart all the limitations the applicant intends and argues. Such limitations are not present in the claims.

----- NEW CITATIONS -----  
NONE

**CLAIMS**

1. A real-time vehicle or equipment management system including a primary focal node (PFN), comprising:

at least one sensory device monitoring and reporting on data including command function results of at least one of peripheral devices and equipment with application specific data and optional application specific geographic coordinates corresponding to the application specific data;

at least one memory, operatively connected to said at least one sensory device, and located in or on the vehicle or the equipment, storing a plurality of interface protocols for interfacing and communicating, said memory equipped with at least one of an application specific backup device and a redundant memory function recording application specific automated and remote control command strings to the peripheral devices that perform automated and remote control functions;

at least one processor responsively connectable to said at least one memory, and implementing the plurality of interface protocols for interfacing and communicating with the plurality of external devices;

a plurality of external devices supported by at least one interface for C.O.T.S. products and accessories, the plurality of external devices interfacing with said at least one processor via at least one of the plurality of interface protocols, including at least one of: pagers, wireless phones, radio frequency equipment, locating equipment systems, cordless phones, laptops, one-way communication device, two-way communication device, and computer organizers, at least one of said plurality of external devices including a report back capability to report the data collected by said at least one sensory device to at least one remote location including the application specific data that is stored in the PFN; and

at least one two-way communication system including at least one security device or routine to condition the signal with at least one security protocol including at least one encryption technology to securely interface between at least one of the plurality of external devices and said at least one processor.

2. A real-time vehicle or equipment management system including an optional security function that restricts unauthorized access thereto, comprising:

at least one operation sensor recording the operations of the at least one of the vehicle and equipment as a recording signal;

a memory storing the operations of the vehicle or the equipment received from said operation sensor in a secure manner; and

a processor responsively connectable to said memory, receiving the recording signal,

at least one communication device reporting or transferring data to at least one remote monitoring and control system with transmission of the data being optionally two-way transmission for memory storage recording of remote control commands, the recording signal from at least one of operation sensor, audio data records and visual data records, said at least one communication device comprising at least one of:

a two-way pager responsively connectable via at least one of a processor and a computer stored in a secured manner and capable of transmitting data to download to at least one remote monitoring system;

a wireless telephone responsively connectable via the at least one processor and computer stored in a secure manner and capable of transmitting data to download to the at least one remote monitoring system;

a radio frequency transceiver responsively connectable to the at least one processor and computer stored in a secure manner and capable of transmitting data to download to the at least one remote monitoring system;

a physical connector interface port responsively connectable to the at least one processor and computer and at least one of protected, shielded and maintained in a secure manner, and capable of transferring data to download to the at least one remote monitoring system;

an optical light data transmission port responsively connectable to the at least one processor and computer and securely maintained, and capable of transmitting data to download to the at least one remote monitoring system;

a multi-tasking law enforcement device capable, optionally through electronic security protocols, to communicate with the at least one processor and computer and download to the at least one remote location;

at least one processor and computer responsively connectable to at least one memory and at least one auxiliary communication device in a secure manner that can be processed to any other communication device responsibly connectable to the processor or computer to download the data to the at least one remote monitoring system;

at least one processor and computer responsively connectable to a Global Positioning System (GPS) able of transmitting GPS coordinate data protocol to the at least one remote monitoring system;

at least one processor and computer responsively connectable to at least one magnetic card swipe device that can transmit via other communication devices to the at least one remote monitoring system for at least one of billing, debiting and crediting;

at least one processor and computer responsively connectable to at least one of audio and video devices and other communication systems to at least one of guide and control remotely a vehicle;

at least one processor and computer responsively connectable to at least one memory to record at least one of an audio and video signal, and data used to control a vehicle remotely; and

at least one two-way communication system including at least one security device or routine to condition the signal with at least one security protocol including at least one encryption technology to securely interface between at least one communication device and the remote location.

3. A real-time vehicle or equipment management system according to claims 1 or 2, wherein said plurality of external devices includes at least one of: an electrical actuating accessory and at least one peripheral device controlling automated remote control functions utilizing at least one of electricity, compressed air, gases, vacuums, hydraulic and fluid pressure.

4. A real-time vehicle or equipment management system according to claims 1 or 2, wherein said plurality of external devices includes at least one of: electro magnets solenoids, motors, mechanical or silicon relays, pistons, cylinders, pumps, valves, adjustable valves pindle valves cables, linkages levers, shifter forks, paws, ratchets, catches, couplers, spring returns, gearing or power transfer mechanisms cases, brake pads disk assemblies, or drums, clutches and/or interlocking drive mechanisms, spined hub collars and shafts.

5. A real-time vehicle or equipment management system according to claims 1 or 2, wherein said at least one of said plurality of external devices include a backup system to provide back up to any automated, remote control system.

6. A real-time vehicle or equipment management system according to claims 1 or 2, wherein said at least one of said plurality of external devices includes at least one of a coyote circuit and other circuit used to create a plug and play connector as a universal modality to interface with at least one of electrical parts, components, devices, C.O.T.S. personal products or different manufactures products.

7. A real-time vehicle or equipment management system according to claims 1 or 2, wherein said at least one of said plurality of external devices includes at least one application used in conjunction with a security system, home computer controller system, household equipment and utilities management system to organize, store, complete phone node contact and transmit data for utility and/or equipment use for any billing, personal records and/or taxing for same, as well as, provide services for repair and maintenance purposes.

8. A real-time vehicle or equipment management system according to claims 1 or 2, wherein said at least one of said plurality of external devices includes the function of operating at a specific location and not being transferrable to another location without authorization, and when transferred in an unauthorized manner, the at least one of said plurality of devices transmits an identification signal to report the location of the displaced equipment.

9. A real-time vehicle or equipment management system according to claims 1 or 2, wherein said at least one of said plurality of external devices are supported by a universal interface for separate C.O.T.S. products and accessories, the at least one of the plurality of external devices interfacing with said at least one processor via the at least one of the plurality of interface protocols, providing the capability of the at least one of the external devices to be at least one of remotely controlled and remotely operated.

10. A real-time vehicle or equipment management system according to claims 1 or 2, wherein said primary focal node supports at least one of application specific software protocols and hardware systems for industry standards for recorded data as determined by at least one of codes, specifications, rules regulations, and laws, for at least one of vehicles, equipment or machinery use.

11. A real-time vehicle or equipment management system according to claims 1 or 2, wherein said real-time vehicle or equipment management system includes redundant remote storage in at least one remote location in at least one application specific industry standard protocol as determined by at least one of codes, specifications, rules, regulations, data handling procedures and laws for at least one of equipment, machinery and vehicle use.

12. A real-time vehicle or equipment management system according to claims 1 or 2, wherein said real-time vehicle or equipment management system is at least one of global network, web and Internet accessible to monitor remote control function in real time and to mass store data off-board as transmitted by the PFN and/or other machine messaging systems and to access the web for personal use from the PFN for E-mail messaging and/or remote tracking either personally, as commercial service and/or for legal and/or governmental reasons.

13. A real-time vehicle or equipment management system according to claims 1 or 2, wherein said real-time vehicle recording system is substantially stored in a stop and control box to prevent unauthorized access thereto and the vehicle.

14. A real-time vehicle or equipment management system according to claims 1 or 2, further comprising a payment mechanism in or on the vehicle, responsively connectable to said at least one processor, said payment mechanism collecting vehicle information and providing real-time billing, debiting or crediting from the vehicle, and retrieving at least one of a script or electronic signature from a card carrier, and verifying the identity of the card carrier via at least one of photograph, fingerprints, and identification.

15. A real-time vehicle or equipment management system according to claims 1 or 2, wherein said at least one processor performs at least one of the following functions:

- remotely controlling at least one of robotic functions to activate and control vehicle operations, remotely billing for use of the vehicle, remotely operating at least one machine, evaluating and diagnosing computer or processor malfunctions, remotely ordering materials and service personnel to perform at least one of service and repairs, remotely performing price quotes for cost of the at least one of service and repairs, remotely performing repairs electronically, and remotely shutting down equipment;

- remotely controlling data exchange representing a monetary exchange via a focal node to perform a secure and protected containment function of: to restrict unauthorized use of equipment, to record and preserve data in an acceptable legal manner, and to bill at least the vehicle user, thereby providing a total accountability system;

- at least one of networking and communicating with at least one gateway to other computers and computer networks that manage data, said gateway determining whether the other computers and computer networks are to be at least one of networked and communicated with to further monitor and store data for at least one of billing, regulatory compliance and legal compliance, and optionally for at least one of social economic and environmental impact;

- at least one of networking and communicating with at least one of other computers and computer networks that manage data, including at least one of vehicle location, equipment technical assistance, personal accounting for machine or equipment use, billing, debiting, crediting, vehicle operations, service and repairs; and

- monitoring equipment for health and safety conditions potentially adversely affecting the public, including at least one of reckless driving, driver impairment, pollution, vehicle unsafety.

16. A real-time vehicle or equipment management system according to claims 1 or 2, wherein said at least one processor performs at least one of the following functions:

- collecting machine message data from said real-time vehicle recording system used to compile data for a public media or web page, and transmitting the machine data thereto;

- presenting the machine message data on at least one web page that originated from at least one equipment on said real-time vehicle or from a machine messaging network;

- recording and reporting to a monitoring gateway for billing for highway use by the vehicle;

- collecting and storing data corresponding to charging at least one electric vehicle;

- reporting, recording and billing automatically using a real-time billing system in the vehicle corresponding to time a geographic area roadway is used;

- determining impact on environment including roadways, using at least one sensor recording at least one of:

weight and emissions ratings for atmospheric impact type of at least one of fuel and energy used;  
time of operational machine use;  
amount of fuel or energy used;  
type of waste product produced; and  
amount of the waste product produced.

17. A real-time vehicle or equipment management system according to claims 1 or 2, wherein said at least one processor performs at least one of the following functions:

recording at least one of audio and video traffic vehicle impact, and recording and reporting to at least one remote monitoring system for at least one accident investigation and machine accidents in a data secure manner;

recording information used in insurance investigations to decide claims and assign liability;

determining liability and accountability to be used in legal proceedings and optionally to be used in determining safety parameters, rules, regulations and laws;

recording at least one of audio and video captured criminal incidents by activating unattended vehicle systems to report criminal events through remote control;

recording at least one of audio and video captured news events as witnessed by a machine system including at least one of weather conditions, and traffic conditions.

18. A real-time vehicle or equipment management system according to claims 1 or 2, further comprising at least one operations sensor recording information including at least one of operations of the vehicle, highway conditions, speed limits, driving conditions including speeding, reckless driving, drunken driving, road rage, pensive or inefficient driving, and wherein the information of the vehicle are received from said operation sensor and stored in said memory and downloaded to at least one of a remote monitoring system, a remote billing system, and a remote data analysis system.

19. A real-time vehicle or equipment management system according to claims 1 or 2, wherein storage of the information includes storage with two onboard and at least one offboard storage of the host piece of equipment, the offboard storage optionally including application specific Email or warning flag detailing an electronic serial number associated with a privately owned or personal E-mail address.

20. A real-time vehicle or equipment management system according to claims 1 or 2, wherein the PFN includes more than one purpose optionally billing for commercial service or for specific service of a machine and simultaneously gathering data on any incident or accident event or provide additional controls by off board control and/or management systems in an emergency or in the case of a compromised operator in real-time.



21. A real-time vehicle or equipment management system according to claims 1 or 2, wherein an electronic serial number (ESN) allows each element within the matrix to be securely and accurately tracked, inventoried or controlled, either through a local control loop or remotely, by an authorized application or agency.

22. A real-time vehicle or equipment management system according to claims 1 or 2, wherein an electronic serial number includes the basis for digital encryption of information passed between the PFN device and the controlling entity with local network processing nodes through public communications channels such as the phone lines or Internet initiated in many cases wirelessly from mobile PFNs accompanied by their Mobile Identification Number.

23. A real-time vehicle or equipment management system according to claims 1 or 2, wherein this programmable software and/or any other accountable software program that performs automated and remote control and/or robotics functions as a result of programming that can authorize, authenticate and preserves commands and save feedback data as a TRAC software program and proprietary to this technology and its nature and scope.

24. A real-time vehicle or equipment management system according to claims 1 or 2, wherein at least one non-volatile memory storage and controlled events are in secured environments so that it is highly tamper resistant through physical means and equally protected through electrical means and tamper resistant software programming to become an agreed upon standard for accountable reliable and trusted software commands and record keeping for passive and aggressive remote control and robotics to analyze, judge, evaluate, value, appraise and monitor, manage and control at least one of vehicle use, machine use, equipment use, facility or installation functions, perform financial transactions in real time and in stationary and mobile settings.

25. A real-time vehicle or equipment management system according to claims 1 or 2, wherein accountable data is provided to an E-mail address web site and/or through the use of the World Wide Web and/or Internet Protocol (IP) for at least one of financial purposes, government uses, service providers, social purposes, environmental purposes.

26. A real-time vehicle or equipment management system according to claims 1 or 2, wherein at least one of modular and programmable routines are determined by the existing hardware and operating system firmware or software for any application responsively connectable through any communication medium by querying each component device attached through a PFN/TRAC system and/or piece of equipment to determine if said connectable component is legitimate and cleared for safe public use.

27. A real-time vehicle or equipment management system according to claims 1 or 2, wherein a registry includes all applicable government agencies with their own access to the Registry and/or network with encrypted codes and Identity command strings which are communicative and also access for the general public and their Private Encrypted Identity codes (PINs, etc.) access to same said registry.

28. A real-time vehicle or equipment management system according to claims 1 or 2, wherein a registry is accessible by a plurality of manufacturers on a worldwide scale with a plurality of security protocols in the marketing of component, devices and equipment and manufacture must provide a program to be given authorization for sale, and wherein the registry will not activate either the component device and/or piece of equipment without authorization, and resale of the component device or piece of equipment will be requested upon each connectable and queried to respond to the nature of the new install as the registry is contacted and requested to activate the unit.

29. A real-time vehicle or equipment management system according to claims 1 or 2, wherein a registry including encryption on the Web will support any and all payment industry software.

31. A real-time vehicle or equipment management system according to claims 1 or 2, wherein record keeping requires at least one of terminal and device electrical serial numbers and personal identification numbers as part of its authorization and authentication program with the time date and any geographic location coordinates or address of all the equipment and systems participating or performing entries or accessing any application folder or event file in storage at any location or part of the registry.

32. A real-time vehicle or equipment management system according to claims 1 or 2, wherein a host piece of equipment will not operate any of its accessories unless it is provided the correct signal from the registry or a security network, and wherein commercial off the shelf (COTS) products utilize the security functions, resulting in immediate and cost effective conversions.

33. A portable primary focal node (PFN) tracking device that is worn by an individual and reports a location to at least one web address through a public server gateway node, or publicly owned provider node using any type of communication system, an additional claim is made for the networking use of any multi-communication capable PFN to relay or repeat shorter range signals for personally worn PFN devices.

34. A real-time or equipment management system according to claims 1 or 2 that serves as an accountable end user instruction center or audio tutor to deliver E-learning and educational programming via the PFN TRAC System and discretely.

35. A real-time or equipment management system according to claims 1 or 2 that can be converted to the highest government and military security protocols, e.g., DES and DET, for national security public safety, nation briefing functions.

36. A real-time or equipment management system according to claims 1 or 2 that provides write one-time memory storage locally as a secure accountable function to track and identify the source of any tampering or hacking to the PFN/TRAC System.

**AMENDED CLAIMS**

[received by the International Bureau on 11 August 2000 (11.08.00);  
new claim 37 added; remaining claims unchanged (1 page)]

35. A real-time or equipment management system according to claims 1 or 2 that can be converted to the highest government and military security protocols, e.g., DES and DET, for national security public safety, nation briefing functions.

36. A real-time or equipment management system according to claims 1 or 2 that provides write one-time memory storage locally as a secure accountable function to track and identify the source of any tampering or hacking to the PFN/TRAC System.

37. A real-time vehicle or equipment management system according to claims 1 or 2 that provides an accountable plug, play, and program interface and prioritizes, control of all onboard equipment, OEM electronics, or carried on electronic devices interfaced with the vehicle or host equipment, including any associated communication protocol therewith, and additionally records for at least one of: use of time, location, voice information, data transmitted in the application specific event recorder, and data regarding standards and legal effort to determine essential data or voice record protocol.